

WHAT IS CLAIMED IS:

1. A magnetic head comprising a single pole type head which includes a main pole and a return pole, wherein said main pole is composed of a magnetic layer on which a non-magnetic metal layer is formed and a non-magnetic insulator layer is formed on said non-magnetic metal layer.

2. The magnetic head according to claim 1, wherein said main pole is composed of a FeCo layer, a CoNiFe layer, or a multilayered film consisting of FeCo and non-magnetic layers.

3. The magnetic head according to claim 1, wherein said non-magnetic metal layer is made of NiCr, Cr, Ta, or TaW and said non-magnetic insulator layer is made of Al_2O_3 .

4. The magnetic head according to claim 1, wherein said non-magnetic metal layer has a thickness falling within a range of 5-30 nm.

5. The magnetic head according to claim 1, wherein said main pole has an air-bearing surface of a trapezoid shape and said non-magnetic metal layer is formed on the surface of one of parallel sides, which is longer, of the trapezoid.

6. A method of fabricating a magnetic head comprising a single pole type head which includes a main pole and a return pole, said method comprising the steps of:

forming a magnetic layer which is processed to be said main pole;

forming a first non-magnetic metal layer and a non-magnetic

insulator layer in order on said magnetic layer;

forming a first mask of a resist layer on said non-magnetic insulator layer;

shaping said non-magnetic insulator layer by reactive ion etching, using said first mask, thus forming a second mask; and

shaping said magnetic layer into a designed shape of said main pole, using the second mask.

7. The method of fabricating a magnetic head according to claim 6, wherein said magnetic layer is a FeCo layer, a CoNiFe layer, or a multilayered film consisting of FeCo and non-magnetic layers and etching gas that is used for said reactive ion etching includes Cl_2 or BCl_3 .

8. The method of fabricating a magnetic head according to claim 7, wherein said first non-magnetic metal layer is made of NiCr, Cr, Ta, or TaW and said non-magnetic insulator layer is made of Al_2O_3 .

9. The method of fabricating a magnetic head according to claim 6, wherein said first non-magnetic metal layer has a thickness falling within a range of 5-30 nm.

10. A method of fabricating a magnetic head comprising a single pole type head which includes a main pole and a return pole, said method comprising the steps of:

forming a magnetic layer which is processed to be said main pole;

forming a first non-magnetic metal layer, a non-magnetic insulator layer, and a second non-magnetic metal layer in order on said magnetic layer;

forming a first mask of a resist layer on said second non-magnetic metal layer;

shaping said second non-magnetic metal layer by ion milling, using said first mask, thus forming a second mask; shaping said non-magnetic insulator layer by reactive ion etching, using said second mask, thus forming a third mask; and

shaping said magnetic layer into a designed shape of said main pole, using said third mask.

11. The method of fabricating a magnetic head according to claim 10, wherein said magnetic layer is a FeCo layer, a CoNiFe layer, or a multilayered film consisting of FeCo and non-magnetic layers and etching gas that is used for said reactive ion etching includes Cl_2 or BCl_3 .

12. The method of fabricating a magnetic head according to claim 11, wherein said first non-magnetic metal layer is made of NiCr, Cr, Ta, or TaW and said non-magnetic insulator layer is made of Al_2O_3 .

13. The method of fabricating a magnetic head according to claim 10, wherein said first non-magnetic metal layer has a thickness falling within a range of 5-30 nm.

14. The method of fabricating a magnetic head according to claim 10, wherein said second non-magnetic metal layer is made of NiCr, Cr, Ta, TaW, Cu, or Au.

15. A method of fabricating a magnetic head comprising a single pole type head which includes a main pole and a return pole, said method comprising the steps of:

forming a magnetic layer which is processed to be said main

pole;

forming a first non-magnetic metal layer, a non-magnetic insulator layer, and a second non-magnetic metal layer in order on said magnetic layer;

forming a first mask of a resist layer on said second non-magnetic metal layer;

shaping said second non-magnetic metal layer and said non-magnetic insulator layer by reactive ion etching, using said first mask, thus forming a second mask; and

shaping said magnetic layer into a designed shape of said main pole, using said second mask.

16. The method of fabricating a magnetic head according to claim 15, wherein said magnetic layer is a FeCo layer, a CoNiFe layer, or a multilayered film consisting of FeCo and non-magnetic layers and etching gas that is used for said reactive ion etching includes Cl_2 or BCl_3 .

17. The method of fabricating a magnetic head according to claim 16, wherein said first non-magnetic metal layer is made of NiCr, Cr, Ta, or TaW and said non-magnetic insulator layer is made of Al_2O_3 .

18. The method of fabricating a magnetic head according to claim 15, wherein said first non-magnetic metal layer has a thickness falling within a range of 5-30 nm.

19. The method of fabricating a magnetic head according to claim 15, wherein said second non-magnetic metal layer is made of NiCr, Cr, Ta, TaW, Cu, or Au.